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LETTER TO THE EDITOR

An algorithm for maintaining nipple projection following nipple reconstruction

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Sir,

Nipple reconstruction is important for adding a sense of realism and symmetry to the reconstructed breast mound. There are numerous methods in clinical use to reconstruct the nipple–areola complex, and a comprehensive review can be found elsewhere [1]. Following nipple reconstruction procedures, the delicate flaps constituting the nipple are in need of mechanical protection as they are susceptible to external pressure that can lead to skin sloughing, loss of nipple projection, flap necrosis and possible contamination. Current advice is to avoid direct pressure on the reconstructed nipple for 7 days following the procedure [2]. Several methods for post-operative dressings for nipple reconstruction have been described, with the ultimate goal of long-lasting nipple projection [2–5]. We report a simple algorithm developed by a single surgeon utilising a combination of immediate post-operative foam dressing to stabilise the nipple complex followed by an innovative nipple shield constructed from mouldable thermoplastic.

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The dressing consists of 1-in.-thick foam cut into 2×2-in. squares with a hole through the middle to accommodate the newly constructed nipple. A 4.0 suture is used to secure the nipple under light tension to a 1-in.-long piece of cut microbiology swab handle, and clear adhesive dressing is placed over the top to provide a protective barrier (Fig. 1).

This modified foam dressing provides excellent immediate post-operative stabilisation of the nipple with cushioning and shock absorbent foam. In a long term, many patients have found it to be cumbersome and aesthetically displeasing and not appropriate for prolonged wear in the weeks following the operation. These shortcomings have a detrimental effect to the patient's quality of life, thus negatively influencing their compliance with post-operative recommendations [2]. For this reason, we have comprised a very simple and effective modified thermoplastic nipple shield to be inserted into the patients' bra. The thermoplastic used to create the splint is widely available in most operating theatres, and thus, there is no need for expensive factory-made splints that add cost to the patients' care [2].

The thermoplastic material is cut into a rectangular shape 2×2 in. and immersed in hot water until pliable. It is moulded into the desired shape using an index finger to make the desired level of protrusion in the centre of the splint to match the patients' specific nipple and contour of the breast (Fig. 2).

Our experience of 72 patients over 2 years using the above algorithm was that all of our patients have resulted in high satisfaction rates, a maintenance of nipple projection superior to our prior experiences and minimal impact on patients' activities and morbidity. This protocol is also inexpensive, as all methods used are readily available in a standard operating room.

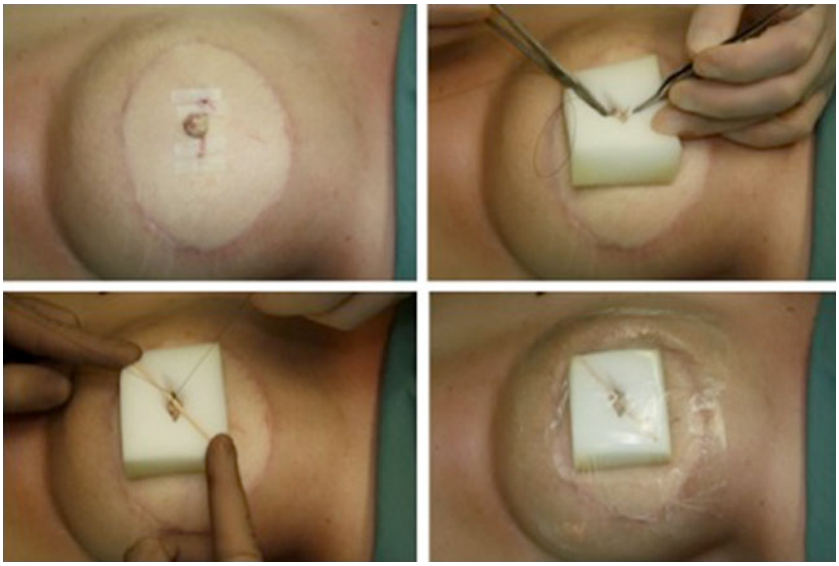

Fig. 1 Following nipple reconstruction the 1-in-thick foam is applied over the reconstructed nipple complex with clear adhesive dressing applied to act as a protective barrier

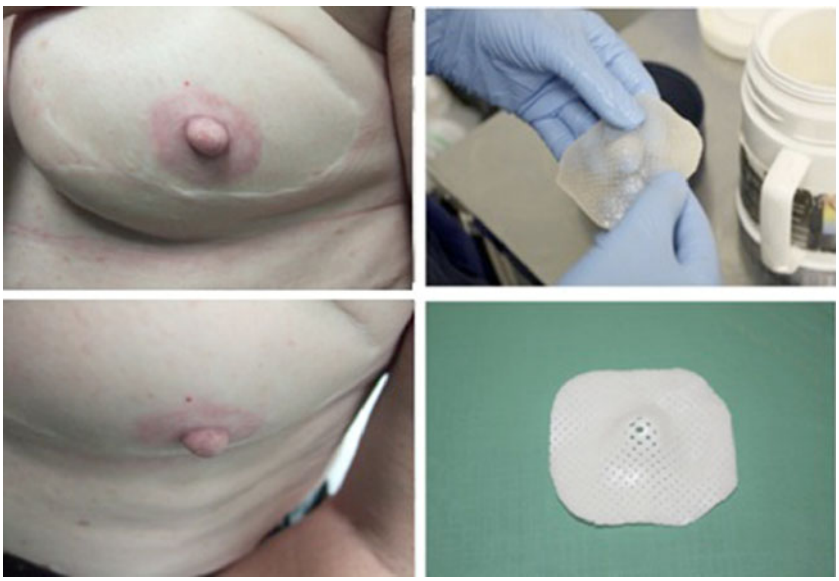

Fig. 2 Once moulded into the desired shape following immersion in hot water, the pliable thermoplastic is applied overlying the constructed nipple to the individual breast contour

Conflict of interest None.

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